

Pamela F. Faggert
Chief Environmental Officer and
Vice President-Corporate Compliance

Dominion Resources Services, Inc.
5000 Dominion Boulevard, Glen Allen, VA 23060
Phone: 804-273-3467

dom.com



May 15, 2014

Mr. David Paylor, Director
Virginia Department of Environmental Quality
629 East Main Street
P.O. Box 10009
Richmond, Virginia 23240

RECEIVED
MAY 19 2014

Re: Request for Extension of Mercury and Air Toxics Standards (MATS) Compliance Date
Virginia Electric and Power Company (Dominion Virginia Power) - Yorktown Power
Station Units 1 and 2

Dear Mr. Paylor:

On February 16, 2012, the U.S. Environmental Protection Agency (EPA) published notice of final regulations under Section 112(d) of the Clean Air Act (CAA) for new and existing coal- and oil-fired electric generating units (EGUs). The regulations, commonly referred to as the Mercury and Air Toxics Standards (MATS), establish strict emission limits for particulate matter, hydrochloric acid and mercury on a 30-day rolling average basis for existing units. The MATS limits take effect on April 16, 2015.

Dominion Virginia Power (Dominion or the Company) owns and operates a number of coal- and oil-fired EGUs in Virginia that are subject to the MATS requirements, including three units at Dominion's Yorktown Power Station in Yorktown, Virginia: coal-fired Units 1 (159 MW) and 2 (164 MW) and oil-fired Unit 3 (818 MW). To comply with MATS on the oil-fired unit, the Company plans to operate Yorktown Unit 3 under the "limited use unit" provisions. These provisions apply to a liquid oil-fired electric steam generating unit with an annual capacity factor of less than 8% of its maximum or nameplate heat input, whichever is greater, averaged over a 24-month block contiguous period commencing April 16, 2015.

The coal-fired Yorktown Units 1 and 2 are not currently equipped with the necessary controls to achieve and maintain compliance with the MATS emissions limits. Dominion planned to retire both units by December 31, 2014 well in advance of the April 16, 2015 MATS compliance deadline; however, certain transmission upgrades have to be installed before the units can be retired without an adverse impact on the reliability of the electric grid. The transmission upgrades were originally anticipated to be completed prior to the summer of 2015. That timing would have permitted the retirement of Units 1 and 2 in advance of the MATS compliance deadline. Due to circumstances explained in detail below, this schedule has been delayed and is now expected to extend beyond the April 16, 2015 MATS compliance deadline. Accordingly, Dominion respectfully requests a one-year extension of the MATS compliance deadline for Yorktown Units 1 and 2, including all related performance testing, recordkeeping and reporting

requirements, and all applicable compliance dates set forth in 40 CFR Part 63, Subparts UUUUU and the applicable general requirements in 40 CFR Part 63 Subpart A.

Yorktown Retirements

On November 1, 2011, Dominion submitted an initial notification of the proposed deactivation of Yorktown Unit 1 to PJM Interconnection, L.L.C. (PJM), as required by the conditions of the PJM tariffs under which it operates. A copy of that notification is enclosed as Attachment A.

PJM evaluated the impacts of the Yorktown Unit 1 retirement on the integrity of the electric grid. PJM determined that the retirement of Yorktown Unit 1 will adversely affect the reliability of the PJM transmission system absent upgrades to the Transmission System. At that time, PJM and Dominion estimated that it would take approximately three and a half years (until approximately June 2015) to complete the transmission system upgrades necessary to alleviate the identified reliability impacts. Under the then-current system conditions, PJM and Dominion determined that completing the necessary transmission upgrades by June 2015 would eliminate the need to operate Yorktown Unit 1 beyond its initially proposed December 31, 2014 retirement date for reliability reasons. A copy of PJM's analysis (dated December 14, 2011), including a listing of specific reliability impacts, is provided as Attachment B.

During 2011 and into 2012, the Company was evaluating the option of converting Yorktown Unit 2 to natural gas fuel and therefore did not include Unit 2 in the deactivation notice. However, after evaluation of the potential repowering, the Company concluded that there was not enough firm gas supply to support year-round operation of gas-fired generation at Yorktown Unit 2, and that an expansion of the gas supply could not be completed until 2018. In addition, estimated costs to expand natural gas capacity to support generation in the area were significant and would exceed the cost of the transmission alternatives. On October 9, 2012, the Company notified PJM of the planned retirement of Yorktown Unit 2 effective December 31, 2014. PJM's response to the Unit 2 retirement notification (dated November 8, 2012), provided as Attachment C, specified that the Unit 2 retirement would not adversely affect the reliability of the electric transmission system provided that Unit 2 does not retire sooner than proposed and the previously identified baseline upgrades related to the retirement of Yorktown Unit 1 is completed prior to June 2015.

Skiffes Creek Transmission Project

To address projected North American Electric Reliability Corporation (NERC) violations related to the Yorktown retirements, Dominion filed with the State Corporation Commission of Virginia (Commission) on June 11, 2012, an application for approval and certification of electric transmission facilities, consisting of construction of the Surry-Skiffes Creek 500 kV transmission line, the Skiffes Creek-Wheaton 230 kV transmission line, and the Skiffes Creek 500 kV-230

kV-115 kV Switching Station, and work at Dominion's existing Surry and Whealton stations (collectively, the Skiffes Creek project).¹

In its Application, Dominion stated that electric power flow studies projected violations of mandatory NERC Reliability Standards on existing facilities to occur by the summer of 2015, and that the failure to address these projected violations could lead to loss of service and potential damage to the Company's electrical facilities in the North Hampton Roads load area.² During the course of the Commission proceeding, all of the load flow studies conducted by Dominion were independently verified by the Commission Staff consultant, John Chiles. Mr. Chiles determined that with the retirement of either Yorktown unit, NERC reliability violations would occur beginning in 2015.³

In the Commission proceeding, Dominion explained how the Skiffes Creek project would resolve all of the identified NERC Reliability Violations in 2015 and address the risk of cascading outages by (1) providing a new source of bulk power from the 500 kV system to support the 230 kV system in the North Hampton Roads load area, (2) relieving loading on that system through the addition of a new 230kV source into the Peninsula east of Skiffes Creek, and (3) feeding existing east-west 230 kV and 115 kV lines to be split to receive power from Skiffes Creek Station.

In addition to Dominion and the Commission Staff, thirteen parties participated in the Commission proceeding, including Charles City County, James City County, and landowners, collectively and individually. The Virginia Department of Environmental Quality (DEQ) provided its report on the Skiffes Creek project on August 31, 2012. There were local public hearings and an evidentiary hearing at the Commission that lasted eight days.

On November 26, 2013, the Commission issued an Order approving the Certificate of Public Convenience and Necessity (CPCN) for the Skiffes Creek project to be constructed by Dominion (Approval Order). The Approval Order is included as Attachment D. In the Approval Order, the Commission found that the record demonstrated significant reliability risks beginning as early as 2015 in the North Hampton Roads load area. The Commission further found that to address the

¹ *Application of Virginia Electric and Power Company For Approval and Certification of Electric Facilities for the Surry-Skiffes Creek 500 kV Transmission Line, Skiffes Creek-Whealton 230 kV Transmission Line and Skiffes Creek 500 kV-230 kV-115 kV Switching Station*, Case No. PUE-2002-00029, Application (Jun. 11, 2012) (hereafter, Application).

² The North Hampton Roads load area includes the following: (i) Charles City County, James City County, York County, Williamsburg, Yorktown, Newport News, Poquoson, and Hampton; (ii) Essex County, King William County, King and Queen County, Middlesex County, Mathews County, Gloucester County, and the City of West Point; and (iii) King George County, Westmoreland County, Northumberland County, Richmond County, Lancaster County, and the City of Colonial Beach.

³ Approval Order at 21 (Nov. 26, 2013).

risks and maintain adequate reliability for customers, significant system upgrades are needed to serve the North Hampton Roads load area. The Commission approved all of the components of the Skiffes Creek project described above, but approved an alternative route for the 500 kV transmission line across the James River such that the line would cross the property of the James City County Economic Development Authority (EDA). Because the EDA is a unit of the County government, Dominion does not have the ability to acquire an easement across that property without agreement from the governmental entity. James City County and the EDA had represented during the evidentiary hearing that the EDA would willingly enter into such an agreement with Dominion.

Because no agreement had been executed between Dominion and the EDA, the Commission reopened the record in an Order issued January 7, 2014 to hold a hearing to admit additional evidence on the rights that Dominion needed to construct the Skiffes Creek project across the EDA property. At that hearing, Dominion presented evidence on the schedule risks facing the project. These risks include the U.S. Army Corps of Engineers (Corps) permit process that had been initiated by Dominion in July of 2013 and the retirement of Yorktown Units 1 and 2 pursuant to MATS. On February 28, 2014, the Commission issued an Order Amending Certificates (Amending Order) to amend the Approval Order, approving the Company's proposed route for the 500 kV transmission line across the James River. The Amending Order is included as Attachment E. The basis for the Commission's amendment of the Approval Order included the Corps permit process and the importance of maintaining reliable electric service for customers in the North Hampton Roads load area, which could "no longer depend on Dominion's ability to obtain a right-of-way from the EDA" for construction of the Skiffes Creek project. The Amending Order reiterated the urgent need for the project and stated the following:

The Commission remains concerned about the serious reliability risks to the North Hampton Roads [Load] Area that supported, and continue to support, approval of the Certificated Project. Until the Certificated Project is placed in service to address those risks, the Commission expects Dominion to continue taking all reasonable steps to ensure reliable service is maintained in the North Hampton Roads Area. Such steps should include, but are not necessarily limited to, pursuing the limited extensions of the MATS Rule that are available to the Company and expeditiously pursuing all necessary approvals from the Army Corps.

The Company's application for a Corps permit for the Commission-approved route is pending. Except for some limited work, the Company will not begin construction of the Skiffes Creek project until receiving a permit from the Corps. In addition, there are pending legal actions related to the Skiffes Creek project.⁴

⁴ There is currently pending in James City County Circuit Court a Petition for Declaratory Judgment and Injunction for Skiffes Creek Switching Station filed by James City County on May 23, 2013. In addition, James City County and another party to the Commission proceeding have filed petitions to appeal the November 26, 2013 Commission Order and notices of participation to appeal the February 28, 2014 Commission Order Amending Certificate.

Reliability Analysis

The Company has requested an update from PJM on the analysis of the reliability impacts of the retirements given the delay of the in-service date currently anticipated for the Skiffes Creek project. That updated analysis from PJM, included as Attachment F, is consistent with the previous analysis presented in Attachments B and C in requiring the availability of Yorktown Units 1 and 2 until completion of the Skiffes Creek project, currently estimated to be completed no later than the fourth quarter of 2016.

Because the Skiffes Creek project's commercial operations date now extends past the MATS compliance date of April 16, 2015, and Yorktown Units 1 and 2 must remain available during that time for electric reliability, the Company is hereby requesting a one-year (fourth year) extension of the MATS compliance deadline (i.e., until April 16, 2016) for Yorktown Units 1 and 2.⁵

Requested Action

DEQ is authorized to grant the requested extension under Section 112(i)(3)(B) of the CAA, 42 U.S.C. § 4212(i)(3)(B), and 40 CFR § 63.6(i)(3). For the retiring units included in this request, deactivation and the construction of additional transmission through the Skiffes Creek project is the MATS compliance strategy.

The MATS deadline extension will provide time to complete construction of the additional transmission facilities necessary to deactivate the units without risk of triggering the reliability issues identified by PJM, and provide the flexibility to dispatch these generation assets during the outages of other units where pollution control installations or replacement generation are being constructed in order to comply with MATS and other environmental obligations. The requested extension is consistent with U.S. EPA's discussion of the range of circumstances that might trigger a need for additional time to comply in the preamble to the final MATS rule.⁶

Dominion cannot predict the timing for Corps approval of the Skiffes Creek project. Current estimated timing is based on the assumption that no National Environmental Policy Act Environmental Impact Statement (EIS) would be required. Should the Corps ultimately determine that an EIS is required, the Corps process could be lengthened by up to one year. A one year extension of the Corps process would push the in-service date for the proposed Skiffes Creek project to after April 16, 2016, thereby making it necessary for Dominion to request further time before retirement of the Yorktown units. This request may take the form of a request for a U.S. EPA Administrative Order (AO), pursuant to the process that EPA outlined in

⁵ As noted previously, this extension request includes all related performance testing, recordkeeping and reporting requirements, and all applicable compliance dates set forth in 40 CFR Part 63, Subparts UUUUU and the applicable general requirements in 40 CFR Part 63 Subpart A.

⁶ See 77 *Fed. Reg.* 9410-12; February 16, 2012.

a December 16, 2011 memorandum issued by the Office of Enforcement and Compliance Assurance (OECA).⁷

The estimated construction schedule of the Skiffes Creek project also assumes that Dominion will be able to obtain from PJM timely outages of existing transmission lines required for safe construction of the project. Many outages will be required for construction of the project, which includes substantial use of existing rights-of-way occupied by existing, energized transmission lines. In addition, other delays in the transmission construction, permit delays, or further litigation could occur that may further postpone the deactivation of the coal units at Yorktown.

By requesting this one-year extension based on currently known commitments and obligations, Dominion does not waive its right to request additional time, as necessary, before the retirement of either or both of these units. Accordingly, in the event circumstances described above, or any other unforeseen circumstances, further delay the completion of the necessary project (and thereby push the retirement of either or both of the Yorktown coal units beyond April 16, 2016), the Company intends to inform EPA that the Company may need to pursue further relief, including an AO pursuant to the process discussed above.

Dominion appreciates your prompt consideration of this extension request, and Company representatives are available to meet with you and discuss this request and the enclosed supporting information, if necessary. Please contact me or Lenny Dupuis @ 804-273-3022 to arrange a meeting date or if you have any questions.

Sincerely,



Pamela F. Faggert

Attachments

CC: Mr. Michael S. Dowd – Virginia DEQ
Ms. Tamera Thompson – Virginia DEQ
Ms. Patricia Buonviri – Virginia DEQ
Ms. Diana Esher – U.S. EPA Region III
Mr. Brian Rehn – U.S. EPA Region III

⁷ See EPA OECA, Memorandum: The Environmental Protection Agency's Enforcement Response Policy For Use of Clean Air Act Section 113(a) Administrative Orders In Relation To Electric Reliability And The Mercury And Air Toxics Standard; December 16, 2011.

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May 15, 2014

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Virginia Department of Environmental Quality
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Re: Request for Extension of Mercury and Air Toxics Standards (MATS) Compliance Date
Virginia Electric and Power Company (Dominion Virginia Power) - Yorktown Power
Station Units 1 and 2

Dear Mr. Paylor:

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The coal-fired Yorktown Units 1 and 2 are not currently equipped with the necessary controls to achieve and maintain compliance with the MATS emissions limits. Dominion planned to retire both units by December 31, 2014 well in advance of the April 16, 2015 MATS compliance deadline; however, certain transmission upgrades have to be installed before the units can be retired without an adverse impact on the reliability of the electric grid. The transmission upgrades were originally anticipated to be completed prior to the summer of 2015. That timing would have permitted the retirement of Units 1 and 2 in advance of the MATS compliance deadline. Due to circumstances explained in detail below, this schedule has been delayed and is now expected to extend beyond the April 16, 2015 MATS compliance deadline. Accordingly, Dominion respectfully requests a one-year extension of the MATS compliance deadline for Yorktown Units 1 and 2, including all related performance testing, recordkeeping and reporting

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The Commission remains concerned about the serious reliability risks to the North Hampton Roads [Load] Area that supported, and continue to support, approval of the Certificated Project. Until the Certificated Project is placed in service to address those risks, the Commission expects Dominion to continue taking all reasonable steps to ensure reliable service is maintained in the North Hampton Roads Area. Such steps should include, but are not necessarily limited to, pursuing the limited extensions of the MATS Rule that are available to the Company and expeditiously pursuing all necessary approvals from the Army Corps.

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Because the Skiffes Creek project's commercial operations date now extends past the MATS compliance date of April 16, 2015, and Yorktown Units 1 and 2 must remain available during that time for electric reliability, the Company is hereby requesting a one-year (fourth year) extension of the MATS compliance deadline (i.e., until April 16, 2016) for Yorktown Units 1 and 2.⁵

Requested Action

DEQ is authorized to grant the requested extension under Section 112(i)(3)(B) of the CAA, 42 U.S.C. § 4212(i)(3)(B), and 40 CFR § 63.6(i)(3). For the retiring units included in this request, deactivation and the construction of additional transmission through the Skiffes Creek project is the MATS compliance strategy.

The MATS deadline extension will provide time to complete construction of the additional transmission facilities necessary to deactivate the units without risk of triggering the reliability issues identified by PJM, and provide the flexibility to dispatch these generation assets during the outages of other units where pollution control installations or replacement generation are being constructed in order to comply with MATS and other environmental obligations. The requested extension is consistent with U.S. EPA's discussion of the range of circumstances that might trigger a need for additional time to comply in the preamble to the final MATS rule.⁶

Dominion cannot predict the timing for Corps approval of the Skiffes Creek project. Current estimated timing is based on the assumption that no National Environmental Policy Act Environmental Impact Statement (EIS) would be required. Should the Corps ultimately determine that an EIS is required, the Corps process could be lengthened by up to one year. A one year extension of the Corps process would push the in-service date for the proposed Skiffes Creek project to after April 16, 2016, thereby making it necessary for Dominion to request further time before retirement of the Yorktown units. This request may take the form of a request for a U.S. EPA Administrative Order (AO), pursuant to the process that EPA outlined in

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a December 16, 2011 memorandum issued by the Office of Enforcement and Compliance Assurance (OECA).⁷

The estimated construction schedule of the Skiffes Creek project also assumes that Dominion will be able to obtain from PJM timely outages of existing transmission lines required for safe construction of the project. Many outages will be required for construction of the project, which includes substantial use of existing rights-of-way occupied by existing, energized transmission lines. In addition, other delays in the transmission construction, permit delays, or further litigation could occur that may further postpone the deactivation of the coal units at Yorktown.

By requesting this one-year extension based on currently known commitments and obligations, Dominion does not waive its right to request additional time, as necessary, before the retirement of either or both of these units. Accordingly, in the event circumstances described above, or any other unforeseen circumstances, further delay the completion of the necessary project (and thereby push the retirement of either or both of the Yorktown coal units beyond April 16, 2016), the Company intends to inform EPA that the Company may need to pursue further relief, including an AO pursuant to the process discussed above.

Dominion appreciates your prompt consideration of this extension request, and Company representatives are available to meet with you and discuss this request and the enclosed supporting information, if necessary. Please contact me or Lenny Dupuis @ 804-273-3022 to arrange a meeting date or if you have any questions.

Sincerely,



Pamela F. Faggert

Attachments

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Ms. Tamera Thompson – Virginia DEQ
Ms. Patricia Buonviri – Virginia DEQ
Ms. Diana Esher – U.S. EPA Region III
Mr. Brian Rehn – U.S. EPA Region III

⁷ See EPA OECA, Memorandum: The Environmental Protection Agency's Enforcement Response Policy For Use of Clean Air Act Section 113(a) Administrative Orders In Relation To Electric Reliability And The Mercury And Air Toxics Standard; December 16, 2011.

Attachment A

C.D. Holley
Vice President - Fossil & Hydro System Operations
Dominion Generation

An operating segment of
Dominion Resources, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard, Glen Allen, VA 23060

Web Address: www.dominion.com

The Dominion logo features a stylized graphic of a power plant or turbine to the left of the word "Dominion" in a serif font.

November 7, 2011

Mr. David Schweizer, P.E.
Manager, Power System Coordination
PJM Interconnection
Valley Forge Corporate Center
955 Jefferson Avenue
Norristown, PA 19403-2497

Dear Mr. Schweizer,

Dominion Virginia Power is requesting deactivation (retirement) of its Yorktown Unit 1 located in Yorktown, Virginia. Yorktown Unit 1 will be deactivated effective December 31, 2014. Yorktown Unit 1 has been committed into the RPM capacity market through May 31, 2015.

Dominion has performed extensive analysis of options to enable the Yorktown Coal Fired Unit 1 to comply with the expected requirements of EPA's Cross State Air Pollution Rule, the National Ambient Air Quality Standards (NAAQS) for Ozone and SO₂, the Mercury/Air Toxics Rule (Utility MACT) and section 316b of the Clean Water Act. Installation of equipment and upgrades to comply with the above would require a capital investment of approximately \$316 million between 2011 and 2022 for Yorktown Unit 1. If the environmental regulations are implemented as expected and the energy and capacity markets remain as currently projected, Dominion does not plan to invest for continued operation of this unit beyond the dates above.

Attachment B



955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497

Michael J. Kormos
Senior Vice President - Operations

December 14, 2011

Doug Holley
Vice President – Fossil & Hydro System Operations
Dominion Generation
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

Re: Deactivation Request for Chesapeake Unit 1 and Unit 2 and Yorktown Unit 1

Dear Mr. Holley,

This letter is submitted on behalf of PJM Interconnection, L.L.C. ("PJM"), in response to the Dominion Generation ("Dominion") notices dated November 7, 2011 ("November 7 Notices") requesting to deactivate (retire) the Chesapeake generating units Nos. 1 and 2 and the Yorktown generating unit No. 1 located in the PJM region, effective December 31, 2014. PJM combined the deactivation analysis for these three units into one report since they are scheduled to be deactivated on the same date.

In accordance with section 113.2 of the PJM Tariff, this letter will serve to notify you that the Deactivation of the Chesapeake generating units Nos. 1 and 2 and the Yorktown generating unit No. 1 will adversely affect the reliability of the PJM Transmission absent upgrades to the Transmission System.

PJM Interconnection Analysis performed a preliminary study of the Transmission System and found reliability concerns resulting from the deactivation of these generating units. The specific reliability impacts resulting from the proposed Deactivations include:

Load deliverability study:

- Voltage collapse for the loss of the Bedington – Black Oak 500 kV line.

would have them in-service prior to the next summer peak period following Dominion's proposed Deactivation Date of December 31, 2014 for the Chesapeake generating units Nos. 1 and 2 and the Yorktown generating unit No. 1. PJM continues to work with the affected Transmission Owner Zones to finalize the details of the required upgrade(s), including a more specific completion date. As some of the required upgrades are large in scope and may require siting approval by state commissions, PJM will continue to evaluate the estimated in-service date for these required system upgrades and will report back to you periodically regarding those projected completion dates.

Regardless of whether the deactivation of a generating unit would adversely impact the reliability of the Transmission System, the Generation Owner may deactivate its generating unit, subject to section 113.1 notice requirements. Pursuant to Section 113.2 of the PJM Tariff, Dominion will need to inform PJM of its Deactivation Date for the Chesapeake generating units Nos. 1 and 2 and the Yorktown generating unit No. 1.

Please be advised that PJM's deactivation analysis does not supersede any outstanding contractual obligations between the Chesapeake generating units Nos. 1 and 2 and the Yorktown generating unit No. 1 and any other parties that must be resolved before deactivating the generating units.

Also please note that in accordance with the PJM Tariff Part VI, Subpart C, a Generation Owner will lose the Capacity Interconnection Rights associated with a deactivated generating unit one year from the Deactivation Date unless the holder of such rights submits a new Generation Interconnection Request within one year after the Deactivation Date.

In addition, if a generating unit is receiving Schedule 2 payments for Reactive Supply and Voltage Control, the generating unit owner must inform PJM when the unit is deactivated so that an adjustment in those payments can be made.

Please contact Bill Patzin (610-666-4698) (patziw@pjm.com) in PJM's Interconnection Coordination Department to discuss the next steps in this process, or if you have any questions about the PJM analysis.

Very truly yours,



Michael J. Kormos
Senior Vice President
Operations

cc: Jeff Currier, Dominion (jeffrey.currier@dom.com)

#677403

Attachment C



955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497

Steven R. Herling
Vice President, System Planning
610-666-8834
610-666-4281 | fax

November 8, 2012

Doug Holley
Vice President – Fossil & Hydro System Operations
Dominion Generation
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

Re: Deactivation Request for Yorktown Unit No. 2

Dear Mr. Holley,

This letter is submitted by PJM Interconnection, L.L.C. ("PJM"), in response to the Dominion Generation ("Dominion") notice dated October 9, 2012 requesting to deactivate (retire) the Yorktown generating unit No. 2 ("Yorktown Unit No. 2") located in the PJM Region, effective December 31, 2014.

In accordance with section 113.2 of the PJM Tariff, this letter will serve to notify you that the Deactivation of Yorktown Unit No. 2 will not adversely affect the reliability of the PJM Transmission System, provided the following conditions exist: (i) Yorktown Unit No. 2 does not deactivate sooner than the proposed Deactivation Date of December 31, 2014; and (ii) the previously identified baseline upgrades related to the deactivation of Yorktown Unit No. 1 and Chesapeake Units Nos. 1 and 2 are completed as scheduled prior to June 2015. The recent status updates for the upgrades related to the deactivation of Yorktown Unit No. 1 and Chesapeake Units Nos. 1 and 2 indicate that they are tracking towards completion as scheduled. If either one of these conditions changes then the reliability analysis for Yorktown Unit No. 2 would need to be reevaluated.

Pursuant to Section 113.2 of the PJM Tariff, Dominion will need to inform PJM of its Deactivation Date for the Yorktown Unit No. 2 generator.

Please be advised that PJM's deactivation analysis does not supersede any outstanding contractual obligations between the Yorktown Unit No. 2 generator and any other parties that must be resolved before deactivating the generating unit.

Also please note that in accordance with the PJM Tariff Part VI, Subpart C, a Generation Owner will lose the Capacity Interconnection Rights associated with a deactivated generating unit one year from the Deactivation Date unless the holder of such rights submits a new Generation Interconnection Request within one year after the Deactivation Date.

Attachment D

COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

AT RICHMOND, NOVEMBER 26, 2013

REG-CLERK'S OFFICE
REGISTRATION CONTROL CENTER

2013 NOV 26 P 1:45

APPLICATION OF

VIRGINIA ELECTRIC AND POWER COMPANY
d/b/a DOMINION VIRGINIA POWER

CASE NO. PUE-2012-00029

For approval and certification of electric facilities:
Surry-Skiffes Creek 500 kV Transmission Line,
Skiffes Creek-Whealton 230 kV Transmission Line, and
Skiffes Creek 500 kV-230 kV-115 kV Switching Station

ORDER

On June 11, 2012, Virginia Electric and Power Company d/b/a Dominion Virginia Power ("Dominion" or "Company") filed with the State Corporation Commission ("Commission") an application for approval and certification of an electric transmission project, or for approval and certification of an alternative transmission project ("Application"). Dominion's proposed project and its proposed alternative project are described in turn below.

In its Application, Dominion proposed to construct: (a) approximately 7.4 miles of new overhead 500 kilovolt ("kV") electric transmission line from the Company's existing 500 kV-230 kV Surry Switching Station in Surry County to a new 500 kV-230 kV-115 kV Skiffes Creek Switching Station in James City County ("Surry-Skiffes Creek Line");¹ (b) the Skiffes Creek Switching Station; (c) approximately 20.2 miles of new 230 kV line, in the Counties of James City and York and the City of Newport News, from the proposed Skiffes Creek Switching Station to the Company's existing Whealton Substation located in the City of Hampton ("Skiffes Creek-Whealton Line"); and (d) additional facilities at the existing Surry Switching Station and Whealton Substation. The Surry-Skiffes Creek Line, the Skiffes Creek Switching Station, the

¹ In September 2012, Dominion filed supplemental testimony estimating the length of its proposed route at 8.0 miles. See, e.g., Ex. 38 (Harper supplemental direct).

Association; River Bluffs Condominium Association; James City County Citizens' Coalition; Old Dominion Electric Cooperative ("ODEC"); Charles City County; and the Environmental Respondents.⁵

On August 31, 2012, the Department of Environmental Quality ("DEQ") filed its report on Dominion's Application ("DEQ Report").⁶ The DEQ Report summarizes potential impacts of the Proposed Project and the Chickahominy Alternative Project, makes recommendations for minimizing those impacts, and outlines the Company's responsibilities for compliance with legal requirements governing environmental protection. The DEQ Report includes the following in its Summary of Recommendations:

(i) Alternative Recommendations

- The DEQ Office of Wetlands and Stream Protection recommends that one of the James River crossing alternatives be selected over the Chickahominy-Skiffes Creek-Wheaton Alternative (Environmental Impacts and Mitigation, item 1(c), page 12).
- Department of Conservation and Recreation Division of Parks and Recreational Resources recommends an underwater crossing for the transmission lines, which will have less impact on commercial shippers, boaters and other recreationalist [sic], should the Surry-Skiffes Creek 500 kV Proposed Route be chosen (Environmental Impacts and Mitigation, item 10(c), page 33).
- The Department of Historic Resources supports submerging the transmission lines within or beneath the Chickahominy or James rivers unless additional routes are considered that would not include adverse visual impacts on Carter's Grove and the Captain John Smith National Historic Water Trail (Environmental Impacts and Mitigation, item 12(e), page 39). In addition, the Virginia Outdoors Foundation and Virginia Board of Historic Resources recommend full consideration of the importance of Carter's Grove and its extensive conservation values in the selection of the

⁵ In this proceeding, Appalachian Voices, the Chesapeake Climate Action Network, and the Virginia Chapter of the Sierra Club have referred to themselves collectively as the "Environmental Respondents."

⁶ Ex. 12.

- Coordinate with the Department of Conservation and Recreation regarding its recommendation to protect recreational resources (Environmental Impacts and Mitigation, item 10(c), page 33).
- Coordinate with the Department of Historic Resources regarding recommendations addressing visual impacts, consultations with the agency's Easement Program, National Park Service and affected localities, archaeological and architectural surveys, and evaluations and assessments to Virginia Landmarks Register- and National Register of Historic Places-eligible resources. (Environmental Impacts and Mitigation, item 12(d), page 38).⁷
- Coordinate with the Newport News-Williamsburg Airport as recommended by the Virginia Department of Aviation to prevent potential hazards to aviation and impacts to airport development (Environmental Impacts and Mitigation, item 15(c), page 41).
- Follow the principles and practices of pollution prevention to the extent practicable (Environmental Impacts and Mitigation, item 18, pages 43-44).
- Limit the use of pesticides and herbicides to the extent practicable (Environmental Impacts and Mitigation, item 19, page 44).⁸

On October 24, 2012; and January 10, 2013, public witness hearings were convened in Williamsburg and Richmond, respectively. From April 9 through April 18, 2013, a hearing was conducted for the purpose of receiving evidence offered by the Company, respondents, and Staff.⁹ The Commission also received more than 1,400 written and electronic public comments on the Application.

⁷ On September 7, 2012, DEQ filed additional comments related to the Department of Historic Resources' Phase I Cultural Resources Survey performed for the Proposed Project. Ex. 13.

⁸ Ex. 12 (DEQ Report) at 7-8.

⁹ Additionally, a representative of the Virginia Department of Historic Resources testified on April 9, 2013.

this case, can be constructed in a timely manner, and is the best alternative in this case;

8. The [Chickahominy] Alternative Project is a viable alternative, is electrically equivalent to the Proposed Project and can be constructed in a timely manner. However, the [Chickahominy] Alternative Project has a higher cost than the Proposed Project and will have a greater impact on scenic assets, historic districts and the environment;
9. None of the 230 kV transmission alternatives or [James City County witness Wayne] Whittier's Variations, by themselves, resolved all of the NERC reliability violations for 2015 or 2021;
10. Additional generation, and combinations of new 230 kV transmission alternatives with additional generation resolve the identified NERC reliability violations, but at a significantly higher price and at a greater risk of failing to be completed by the date needed;
11. The Commission may or may not decide to address whether the Skiffes Creek Switching Station is a "transmission line" for purposes of § 56-46.1 F;
12. The route crossing the James River should follow James River Crossing Variation 4 on the condition that the [James City County Economic Development] Authority and [Dominion] conclude a right-of-way agreement within three weeks of the Commission's final order. If such an agreement is not concluded three weeks from the Commission's final order, then the route crossing the James River should be James River Crossing Variation 1;
13. Any certificate issued by the Commission in this case should be conditioned to direct [Dominion] to maintain the tree buffer along BASF Drive by only expanding its existing right-of-way to the west.
14. Any certificate issued by the Commission in this case should be conditioned to direct [Dominion] to use galvanized steel monopoles for crossing the BASF property;
15. Any certificate issued by the Commission in this case should be conditioned to direct [Dominion] to follow the construction practices listed below:

- b) [Dominion] should conduct a vegetation inventory to identify compatible species that can be retained in the right-of-way. The inventory may be limited to types of species, rather than number of plants present.
- c) Where sufficient distance is allowed between the outside conductor and the cleared right-of-way, selective lateral trimming should be used to produce a more feathered appearance to the edge of the right-of-way.
- d) [Dominion] will work with BASF to avoid the use of herbicides in the right-of-way that would interfere with environmental remediation efforts on the property.
- e) An erosion plan should be developed and implemented in areas near rivers or creeks, and near areas with steep slopes.
- f) The right-of-way should be designed and maintained to prevent access by unauthorized persons and, especially, vehicles.^{10,11}

On August 30, 2013, the following parties filed comments on the Hearing Examiner's Report: Dominion; James City County and Save the James;¹² BASF; Lennar; JRA;¹³ the

¹⁰ Finding number 16(f), as identified and incorporated above, is included and recommended in the Hearing Examiner's analyses, and therefore appears to have been inadvertently omitted from his "Findings and Recommendations." Hearing Examiner's Report at 174, 177.

¹¹ *Id.* at 174-77.

¹² The joint comments of James City County and Save the James were filed after the close of business on August 30, 2013. On September 3, 2013, James City County and Save the James filed a motion for leave to amend and refile their comments for the stated purpose of correcting a typographical error. Dominion, which was the only participant to respond to this motion, responded that: (1) the initial comments filed by James City County and Save the James were untimely by one day; (2) the motion should be treated as a request for leave to file comments one day out-of-time; (3) Dominion was not prejudiced in these particular circumstances; (4) Dominion will not object to granting the motion to the extent it permits the amended comments to be filed one day out-of-time; and (5) Dominion objects to portions of those comments, unrelated to the identified typographical error, that seek to include evidence beyond the record in this proceeding and which Dominion indicates would be inappropriate and prejudicial for the Commission to consider. James City County and Save the James filed no reply. We grant James City County's and Save the James's motion, in part, and accept the filing of their amended joint comments. As discussed below, we grant Dominion's requested clarification that our decision in this proceeding has been reached without consideration of evidence not contained in the record. *See, e.g.*, 5 VAC 5-20-240.

¹³ Dominion also filed an objection to JRA's inclusion of evidence in its comments that was not made part of the evidentiary record. JRA filed no reply to Dominion's objection. As noted above, our decision has been reached without consideration of evidence not contained in the record.

transmission lines. Ultimately, the Commission must base its decision on the law as applied to the factual record of the case. That is what we have done herein, as will be explained in detail below. The evidence is clear that the Proposed Project is necessary to continue reliable electric service to the hundreds of thousands of people who live and work across this broad region of Virginia.

It is because of the many impacts associated with transmission lines that the Commission first evaluates whether a proposed transmission line is, in fact, needed. Before approving transmission line construction, landowners, communities, and rate-paying residents and businesses in the Commonwealth expect and deserve assurance that a new line is actually needed.

Determining whether a proposed transmission line or other electric infrastructure, such as a generation facility, is needed often requires analysis of complex engineering evidence. Substantial engineering analysis was evaluated in this case. This evidence allowed us to determine not only whether a need for additional infrastructure exists, but also the magnitude and timing of any such need. A need that is severe and fast approaching, as detailed engineering evidence supports in this case, may require a solution different than if a need is more modest and further in the future.

The reliability risks presented in this case are far reaching and significant. Engineering studies in this case show that when Dominion's transmission system is stress-evaluated under federal and Virginia requirements, a number of transmission system overloads result. These overloads, which appear under the reasonable contingency conditions modeled in this case, identify a broad swath of the Commonwealth where the loss of electric service can be expected as early as 2015 unless Dominion's electric system is reinforced.

assets; landowners; system reliability; and the customers who ultimately pay the costs of electric infrastructure. Although a more detailed analysis of our decision will be included in subsequent sections of this Order, the Commission addresses, at the outset, some of the evidence that was central to this case.

The Commission has considered the environmental impact of transmission lines, including the impact of overhead transmission on viewsheds from the James River and various locations in the vicinity of the Proposed Project. The Commission has also considered all record evidence that highlights the Historic Triangle of Jamestown, Williamsburg, and Yorktown – the importance of which extends well beyond the borders of this Commonwealth.¹⁴ The Commission cannot ignore, however, the change that has transpired from colonial times to date in the area where the Proposed Project would cross the James River.¹⁵ In the vicinity of the Proposed Project's route today are neighborhoods, multiple military installations, theme parks, a marina, a jail and detention center, and a supermarket distribution center, among other businesses and developments. All these developments depend on the same reliable electric grid to maintain the quality of life, health, safety, and prosperity to which our Commonwealth and our nation are accustomed.¹⁶

Numerous electrical alternatives have been offered, explored, and developed for our consideration – many at the suggestion of Staff, the Hearing Examiner, and James City County,

¹⁴ As discussed below, we have also fully considered record evidence highlighting the environmental, scenic, and historic impacts of the Chickahominy Alternative Project.

¹⁵ The Proposed Project would not be visible from most of Jamestown Island, including James Fort. *See, e.g.*, Ex. 124 (Lake rebuttal) at 9; Ex. 83 (McCoy), Attached Exhibit WDM-1 at 17-19; Ex. 118 (Harper rebuttal) at Rebuttal Schedule 1, 2.

¹⁶ *See, e.g.*, Ex. 50 (Reidenbach), Attached 2009 James City County Comprehensive Plan at Introduction 1 ("We will not settle for less than first-class education, medical care, public safety, recreation, and entertainment that strengthen the fabric of our community.").

crosses over the James River on its way to the Surry Nuclear Power Station, Dominion's existing 500 kV transmission system is located south of the James River.¹⁷ Thus, a new 500 kV line extending either down the Peninsula from the Chickahominy Substation or across the James River from Surry is needed if – as is the case here – a further extension of Dominion's 500 kV system onto the Peninsula is required.

Comparing these two 500 kV options, the record supports the Hearing Examiner's findings that the Proposed Project "is the least cost viable alternative for addressing the identified NERC reliability violations presented in this case, can be constructed in a timely manner, and is the best alternative in this case"¹⁸ and that the Chickahominy Alternative Project "has a higher cost than the Proposed Project and will have a greater impact on scenic assets, historic districts and the environment."¹⁹

The Surry-Skiffes Creek Line of the Proposed Project offers a reasonable path into the highly constrained Peninsula where an overhead 500 kV transmission line is needed to reasonably ensure reliability. The Surry-Skiffes Creek Line would begin at the existing transmission switching station near the Surry Nuclear Power Station on the south shore of the James River; cross the James River in a manner designed to avoid, among other things, ship traffic and the airspace of military aircraft from a large nearby military installation (Fort Eustis and Felker Airfield);²⁰ and then come ashore on the BASF property in an industrial area that includes active environmental remediation sites.²¹ A crossing of the James River in this

¹⁷ Ex. 23 (Application), Attached Appendix at 6, 117.

¹⁸ Hearing Examiner's Report at 175.

¹⁹ *Id.*

²⁰ See, e.g., Ex. 118 (Harper rebuttal) at Rebuttal Schedules 1, 2.

²¹ See, e.g., Ex. 48 (Burrows) at Figure VCB-1; Ex. 60 (Henderson) at TCH-2.

Section 56-46.1 of the Code further directs the Commission to consider several factors when reviewing the Company's Application.²² Subsection A of the statute provides, in part, that:

Whenever the Commission is required to approve the construction of any electrical utility facility, it shall give consideration to the effect of that facility on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact. . . . In every proceeding under this subsection, the Commission shall receive and give consideration to all reports that relate to the proposed facility by state agencies concerned with environmental protection; and if requested by any county or municipality in which the facility is proposed to be built, to local comprehensive plans that have been adopted. . . . Additionally, the Commission (a) shall consider the effect of the proposed facility on economic development within the Commonwealth . . . and (b) shall consider any improvements in service reliability that may result from the construction of such facility.

Subsection B of the statute further provides, in part, that:

As a condition to approval the Commission shall determine that the line is needed and that the corridor or route the line is to follow will reasonably minimize adverse impact on the scenic assets, historic districts and environment of the area concerned. . . . In making the determinations about need, corridor or route, and method of installation, the Commission shall verify the applicant's load flow modeling, contingency analyses, and reliability needs presented to justify the new line and its proposed method of installation. . . . Additionally, the Commission shall consider, upon the request of the governing body of any county or municipality in which the line is proposed to be constructed, (a) the costs and economic benefits likely to result from requiring the underground placement of the line and (b) any potential impediments to timely construction of the line.

The Code further requires that the Commission consider existing right-of-way easements when siting transmission lines. Section 56-46.1 C of the Code provides that "[i]n any hearing the public service company shall provide adequate evidence that existing rights-of-way cannot

²² Subsection D of the statute provides that "[a]s used in this section, unless the context requires a different meaning: 'Environment' or 'environmental' shall be deemed to include in meaning 'historic,' as well as a consideration of the probable effects of the line on the health and safety of the persons in the area concerned."

(2) The estimated additional cost of placing the proposed line, in whole or in part, underground does not exceed 2.5 times the cost of placing the same line overhead, assuming accepted industry standards for undergrounding to ensure safety and reliability. If the public utility, the affected localities, and the State Corporation Commission agree, a proposed underground line whose cost exceeds 2.5 times the cost of placing the line overhead may also be accepted into the pilot program; and

(3) The governing body of each locality in which a portion of the proposed line will be placed underground indicates, by resolution, general community support for the line to be placed underground.²³

House Bill 1319 further provides that "[p]ublic utility companies granted a certificate of public convenience and necessity for a proposed transmission line not included in this program or not otherwise being placed underground shall seek to implement low-cost and effective means to improve the aesthetics of new overhead transmission lines and towers."²⁴

Finally, Dominion requests a Commission determination that, based on the facts and circumstances of this case, the Skiffes Creek Switching Station constitutes a "transmission line" for purposes of Code § 56-46.1 F, which provides that "[a]pproval of a transmission line pursuant to this section shall be deemed to satisfy the requirements of § 15.2-2232 and local zoning ordinances with respect to such transmission line."

SYSTEM NEED

A series of load flow studies was introduced as evidence in this proceeding and evaluated by load flow study experts who testified as witnesses in this case. These studies demonstrate that the North Hampton Roads Area needs a significant electric system upgrade soon to maintain adequate reliability.

²³ 2008 Va. Acts ch. 799, Enactment 1, § 4, as extended by 2011 Va. Acts, ch. 244, Enactment 1.

²⁴ *Id.* at § 10.

need does not rely on any single set of assumptions."³¹ Notwithstanding the different assumptions used in the many load flow modeling studies analyzed in this case, the various load flow studies consistently reveal a significant system need in the area.

Dominion testified that it initially conducted load flow modeling studies indicating that normal load growth in the North Hampton Roads Area would result in reliability violations by 2019.³² Those initial studies were analyzed and verified by our Staff.³³

Importantly, the studies showing a need in 2019 were conducted *before* Dominion determined that six local generation units – two at the Yorktown Power Station and four at the Chesapeake Power Station – would be retired as a result of stricter federal environmental regulations, including the Mercury Air Toxics Standard ("MATS Rule").³⁴ Subsequent studies that included the impact of the generation retirements at these power stations showed that the retirement of only one unit at Yorktown was enough to cause reliability violations to begin in the summer of 2015.³⁵ Updated and supplemental studies directed by the Hearing Examiner and verified by Staff, confirm reliability violations occurring in the summer of 2015. For example, updated studies identify reliability violations or overloads projected to occur in 2015 on more

³¹ Staff's Post-Hearing Brief at 9-10. As recognized by Staff, these load flow models included different projected peak loads and different assumptions about both generation and transmission topology. *Id.* at 9.

³² Ex. 31 (Nedwick direct) at 11.

³³ See, e.g., Ex. 79 (Chiles) at 11-16. Although Staff raised a concern about one scenario from the studies showing a 2019 need, Staff was able to replicate and verify those modeling results, and the Company addressed this scenario in rebuttal testimony. See, e.g., Ex. 87 (Nedwick rebuttal) at 24-25; Ex. 79 (Chiles), Attached Exhibit JWC-2 at 2.

³⁴ See, e.g., Ex. 87 (Nedwick rebuttal) at 4; Ex. 110 (Kelly rebuttal); Ex. 103 (Faggert rebuttal). As discussed below, retaining generation at these facilities is not a reasonable alternative to addressing the identified needs of the North Hampton Roads Area.

³⁵ See, e.g., Ex. 23 (Application), Attached Appendix at 72, 78-81; Ex. 87 (Nedwick rebuttal) at 4, n.1.

Yorktown Power Station, which is subject to environmental restrictions that will severely limit its operation until its retirement.⁴²

The Commission is greatly concerned about the widespread nature of the projected NERC reliability violations that are supported by the record of this case and that so many violations are projected to occur as early as 2015. The load flow modeling evidence, which has been verified by our Staff,⁴³ establishes a clear need for significant new electric infrastructure to address fast-approaching reliability violations projected for Dominion's transmission system. With a system need clearly established, we next turn to potential alternatives for satisfying the identified need.

ALTERNATIVES

The parties and Staff presented numerous potential alternatives for addressing the significant and uncontested system needs identified by the record. Those alternatives include generation, demand-side management, lower voltage transmission, underground transmission, transmission in different locations, and combinations of generation and transmission. While some alternatives warranted – and received – considerable evaluation, others are more conceptual or possess glaring shortcomings. However, our decision in this proceeding has been reached only after consideration of all potential alternatives, many of which are addressed below. Additionally, the Commission has considered all relevant factors supported by record evidence for each alternative.

⁴² See, e.g., Ex. 31 (Nedwick direct) at 12-13; Ex. 110 (Kelly rebuttal) at 8, 15; Ex. 103 (Faggert rebuttal) at 14-15.

⁴³ See, e.g., Ex. 79 (Chiles); Tr. 1068-74.

most cost-effective manner.⁴⁷ This assertion fails to appropriately recognize the magnitude of the projected reliability criteria violations made more imminent by significant generation retirements and operational restrictions resulting from environmental regulations. Although the Environmental Respondents cite to our recent approval of a distributed solar program through which Dominion will construct or facilitate up to 30 megawatts of distributed solar,⁴⁸ that 30 megawatts of nameplate capacity – even if all located in the North Hampton Roads Area – does not approach the size needed to address the reliability need identified in this case.⁴⁹ Nor do the Environmental Respondents substantiate their claim that solar resources are currently cost-effective.

Similarly, the record does not support suggestions by James City County that offshore wind or liquefied natural gas generation could satisfy the fast-approaching reliability criteria violations in the North Hampton Roads Area. Because these types of projects are exceptionally complex and, in some respects, may represent uncharted territory for developers,⁵⁰ the risk that such generation will be unavailable to address a need arising as soon as 2015 is too great to warrant further consideration in the instant case.

Based on the record, including the impending generation retirements and operating restrictions at the Yorktown and Chesapeake Power Stations, a more concrete approach to

⁴⁷ See, e.g., Environmental Respondents' Post-Hearing Brief at 14-17.

⁴⁸ *Application of Virginia Electric and Power Company, For approval of a Community Solar Power Program and for certification of proposed distributed solar generation facilities pursuant to Chapter 771 of the 2011 Virginia Acts of Assembly and §§ 56-46.1 and 56-580 D of the Code of Virginia*, Case No. PUE-2011-00117, 2012 S.C.C. Ann. Rept. 328, Order (Nov. 28, 2012).

⁴⁹ Studies were conducted in this case for the specific purpose of calculating how much generation would be needed to address projected reliability violations. See, e.g., Ex. 90 at Rebuttal Schedule 4.

⁵⁰ See, e.g., Tr. 1622-27 (identifying challenges and cost associated with obtaining a permit, constructing, and operating a liquefied natural gas import facility in a populated area like Yorktown); Tr. 1853 (describing the current construction cost of offshore wind).

should be retired.⁵⁴ The Environmental Respondents continued those efforts in the instant proceeding.

The evidence in this case – which includes, but is not limited to, environmental considerations – supports our finding that retrofitting or refueling options cannot address the identified NERC reliability violations in a cost-effective manner.⁵⁵

With respect to the option of retrofitting coal-fired units at the Yorktown and Chesapeake Power Stations with additional environmental equipment, the Commission finds that the risks and costs associated with such an option are too great based on the record. Retrofitting these units would require several very large capital expenditures because the units would need a significant amount of additional equipment to continue coal and oil operations and comply with existing and anticipated environmental regulations.⁵⁶ The evidence in this case indicates that such capital expenditures total many hundreds of millions of dollars and could well exceed one billion dollars.⁵⁷ Additionally, the compliance costs evaluated in this case do not reflect other risks attendant to coal and oil generation, such as the current uncertainty regarding future regulation of carbon dioxide at the federal level.⁵⁸ Moreover, load flow studies analyzed in this

⁵⁴ Environmental Respondents' March 1, 2013 Motion Seeking Leave To File a Notice of Participation Out of Time at 2.

⁵⁵ See, e.g., Ex. 110 (Kelly rebuttal); Tr. 1600-10 (Kelly); Ex. 79 (Chiles), Attached Exhibit JWC-3 at 6-7, and Attached Exhibit JWC-5.

⁵⁶ Tr. 1600-06 (Kelly). As the Hearing Examiner recognized, "Mr. Kelly confirmed that to retrofit Yorktown Units 1 and 2 to comply with environmental regulations would require the installation of a Dry Scrubber, Baghouse, Selective Catalytic Reduction, Water Intake Screens, Variable Speed Drives, and Closed Cycle Cooling." Hearing Examiner's Report at 118.

⁵⁷ Ex. 79 (Chiles), Attached Exhibit JWC-3 at 6-7, and Attached Exhibit JWC-5; Ex. 110 (Kelly rebuttal) at 20-23.

⁵⁸ We recognized these risks in a recent proceeding, *Application of Appalachian Power Company, For approval of transactions to acquire interests in the Amos and Mitchell generation plants and to merge with Wheeling Power Company*, Case No. PUE-2012-00141, Doc. Con. Cent. No. 130730256, Order at 8-9 (July 31, 2013) (citing Presidential Memorandum of June 25, 2013, Power Sector Carbon Pollution Standards, 78 Fed. Reg. 39,535 (2013)).

A combination of retrofitting or repowering at the Yorktown or Chesapeake Power Stations and installing an electric transmission line alternative in this case does not yield a conclusion different from our consideration of these generation alternatives without transmission. A transmission line obviously does not address the natural gas pipeline constraints into the North Hampton Roads Area or environmental regulations that will not allow Dominion to continue operating the Yorktown and Chesapeake Power Stations in the same manner as in the past. These significant generation limitations, as well as the cost and time associated with alternative transmission components, make the cost and risk of the combination generation and transmission alternatives excessive, regardless of which transmission line alternative is chosen.⁶⁴

In summary, while the Commission does not prejudge whether additional generation in the North Hampton Roads Area (or other concepts or projects discussed herein) may be reasonable at some point in the future, the record in this case does not support such generation as a reasonable alternative to a transmission solution for the area's significant transmission system needs appearing in 2015.

Demand-Side Resources

The Commission finds that demand-side resources, such as demand-side response and energy efficiency measures, were appropriately considered in this proceeding. The record supports the Hearing Examiner's conclusion that "additional amounts of [demand-side resources] should not be assumed to be available to address projected NERC reliability violations."⁶⁵

The PJM load forecasts incorporated in Dominion's load flow modeling studies include demand-side resources that have cleared a three-year forward capacity auction conducted by

⁶⁴ See, e.g., Ex. 87 (Nedwick rebuttal) at 13-14; Ex. 91 at Rebuttal Schedule 5.

⁶⁵ Hearing Examiner's Report at 150.

Staff indicates that, to address projected 2015 NERC reliability violations, "the demand-side equivalent of 620 [megawatts] needed for a 'stand-alone' generation option would be required in the North Hampton Roads load area, which has only approximately 2,000 [megawatts] of peak demand."⁷²

However, the Commission finds PJM's testimony that planning studies may be over-relying on demand response raises concerns that warrant further evaluation in future transmission and generation certificate proceedings. Accordingly, Dominion is hereby directed to provide, in future transmission and generation certificate applications, more detailed analysis of demand-side resources incorporated in the Company's planning studies used in support of such applications.⁷³

230 kV Transmission Alternatives

In addition to alternatives that included generation or demand-side resources, as discussed above, several transmission alternatives were presented in this proceeding. Dominion's existing 500 kV system stops at the doorstep of the North Hampton Roads Area, with the closest lines at that voltage running from the Chickahominy Substation and Septa Substations to the Surry Nuclear Power Station.⁷⁴ Presently, a number of 230 kV and 115 kV lines transmit power into and within the North Hampton Roads Area.⁷⁵ As such, it is logical that many of the transmission alternatives evaluated in this proceeding are potential additions to Dominion's existing 230 kV transmission system.

⁷² *Id.* at 22. See, e.g., Ex. 87 (Nedwick rebuttal) at 11-12, Rebuttal Schedule 3.

⁷³ To the extent known by the Company, such information should include, for example, the locations and providers of demand-side resources included in the relevant planning studies.

⁷⁴ Ex. 23 (Application), Attached Appendix at 6, 117.

⁷⁵ *Id.*

a. 230 kV Transmission Underground Alternatives

The feasibility of undergrounding, in whole or in part, a transmission line crossing the James River was the focus of much evidence in this case. Compared to overhead alternatives, underground transmission lines require much different construction and materials, which result in different construction durations and costs. Additionally, the design and capability of a line depend on whether it is overhead or underground. For example, engineering evidence in this case indicates that undergrounding a 500 kV transmission line is not technically viable,⁸¹ meaning that undergrounding options must be at a lower voltage, such as 230 kV.

It is also important to understand that, when comparing transmission lines with different voltages (such as 500 kV and 230 kV), the difference in their voltages is not directly proportional to the difference in their capacities, measured in megavolt amperes ("MVA"), for delivering power. For example, the record in this case shows that the single-circuit 500 kV Surry-Skiffes Creek Line would provide approximately 4,300 MVA of capacity into the North Hampton Roads Area while an underground single-circuit 230 kV line that Dominion recently placed into service provides only 600 MVA of capacity.⁸²

Compared to an overhead transmission line, an underground line can lessen or eliminate certain environmental impacts, including many visual impacts⁸³ and impacts associated with securing a transmission tower into the ground or a river bed.⁸⁴ Replacing the overhead 500 kV

⁸¹ The record identifies only one location in the United States where 500 kV lines have been constructed underground. Those lines, which are short interconnections between generation at the Grand Coulee Dam and an adjacent switchyard, are in the process of being replaced with overhead lines due to reliability concerns. *See, e.g.*, Ex. 93 (Allen rebuttal) at 16, Rebuttal Schedule 3; Ex. 23 (Application), Attached Appendix at 58.

⁸² *See, e.g.*, Ex. 79 (Chiles) at 24; Ex. 33 (Allen direct) at 3-4; Ex. 102 (Thomassen rebuttal) at 13-15, Rebuttal Schedule 8.

⁸³ *See, e.g.*, Ex. 83 (McCoy), Attached Exhibit WDM-1 at 19-21.

⁸⁴ *See, e.g.*, Ex. 93 (Allen rebuttal) at 15.

The Commission has carefully considered the relative impacts to historic resources, scenic assets, and other environmental considerations presented in this case. However, the factors that must be considered in this proceeding, as discussed above, are broad and are not limited only to environmental considerations. Based on the record, the Commission finds that the impediments associated with attempting to address the identified reliability violations in the North Hampton Roads Area by placing a transmission line underground outweigh competing environmental considerations. The Commission finds that underground alternatives do not reasonably meet the reliability need identified in this case.

Underground transmission projects are complex endeavors. The construction of an underground project can involve, among other things, significant horizontal drilling to install the pipes needed to contain underground electric cables, dredging large pits in the ground and the river bed to allow for underground electric cables to be spliced together, and constructing transition stations where the underground cable transitions to an overhead line.⁸⁸ Given the complexity of these projects, Staff noted that most of the recent underground transmission projects constructed by Dominion have experienced delays.⁸⁹

Dominion testified that an underground crossing of the James River would require an estimated 48 months (single circuit) or 60 months (double circuit) to complete.⁹⁰ But the load flow studies in this case demonstrate significant reliability violations occurring the summer after Yorktown generation retires in response to environmental regulations that include an April 2015 deadline for compliance with the MATS Rule. Accordingly, even if Dominion successfully

⁸⁸ See, e.g., Ex. 102 (Thomassen rebuttal).

⁸⁹ Staff's Post-Hearing Brief at 42.

⁹⁰ See, e.g., Ex. 93 (Allen rebuttal) at 10; Tr. 1464-65 (Allen); Dominion's Comments on the Hearing Examiner's Report at 36-37.

would not address projected overloads on one transmission line and one transformer.⁹⁵ This double-circuit option, which, at \$440 million, is estimated to cost \$285 million more than the Proposed Project, would still require additional infrastructure projects (with additional costs and impacts) to address projected reliability violations that the Proposed Project addresses.⁹⁶ Even if a project including a double-circuit 230 kV underground line could be completed in time to address upcoming NERC reliability violations, the Commission finds that the significant reliability and cost disadvantages of such a project, among other detrimental considerations, outweigh the beneficial considerations from constructing a double-circuit transmission line under, rather than over, the James River. The evidence demonstrates that this type of project would not reasonably meet the identified reliability need.

There are similar problems with the underground variation put forth by James City County that would combine a single-circuit 230 kV underground crossing of the James River with a special protection scheme of some unspecific type, among other components of this variation. This James City County underground variation is estimated by Dominion to cost approximately \$146 million more than the Proposed Project⁹⁷ while James City County estimates it would cost \$69 million more.⁹⁸ A James City County witness testified that a special protection scheme could be used to address one projected overload;⁹⁹ however, Dominion identified several transformers overloading with this variation.¹⁰⁰ Additionally, PJM's Vice President of

⁹⁵ See, e.g., Tr. 1071-74 (Chiles); Ex. 90 at Rebuttal Schedule 4.

⁹⁶ Ex. 90 at Rebuttal Schedule 4; Tr. 906-07 (Whittier) (testifying that overall the Company's construction costs are reasonable).

⁹⁷ Ex. 95.

⁹⁸ Tr. 922 (Whittier).

⁹⁹ Tr. 937 (Whittier).

¹⁰⁰ Tr. 1298, 1303 (Nedwick).

at best . . . very problematic and potentially a detriment to reliability."¹⁰⁷ The Commission finds that, among other considerations, the reliability risk associated with this more costly underground alternative, which likely could not be constructed in time to address upcoming projected reliability violations and has been offered without study, outweighs the benefits associated with this option. Based on the evidence, the Commission finds that this alternative would not reasonably meet the reliability need identified in this case.

Although Dominion has not requested that the Proposed Project or any alternative thereof be included in the underground pilot program established by HB 1319, the Commission has nonetheless reviewed the criteria for potential inclusion in this program. Because, as discussed above, the Proposed Project and alternatives thereof are not viable for underground construction, none of the projects evaluated in this proceeding qualify for inclusion in the underground pilot program.¹⁰⁸

b. 230 kV Transmission Overhead Alternatives

James City County proposed two overhead 230 kV alternatives that include, among other components, river crossings near the James River Tower Bridge. Such projects would shift the environmental impacts associated with a river crossing downriver from where the Proposed Project is proposed to cross. Substantially different areas would be impacted by such projects.

The first such alternative, identified as Alternative C, was proposed in prefiled testimony. This alternative was ultimately abandoned by James City County after modeling studies

¹⁰⁷ Tr. 1346-47 (Nedwick). See also Ex. 92 (Herling rebuttal) at 20 ("Operationally, the 230 kV Surry-Skiffes Creek line and PAR, whether underground or overhead, is a challenging solution....").

¹⁰⁸ We therefore need not reach issues concerning the pilot program's other statutory criteria, including the cost criteria which Dominion asserts the underground alternatives also fail. See, e.g., Ex. 93 (Allen rebuttal) at 19-20; Tr. 1454-55 (Allen).

fashion, Variation to Alternative C would leave unaddressed certain projected reliability violations. Additionally, the underground construction required in a populated area of Newport News for this alternative makes it highly unlikely that such a complex project could be constructed in time to address projected reliability violations. The Commission also recognizes that underground construction would cost ratepayers more.¹¹⁷

The significant reliability risk associated with Variation to Alternative C is comparable to many of the 230 kV alternatives with underground crossings of the James River. Although James City County estimates the cost of Variation to Alternative C to be closer to the Proposed Project than those other alternatives, so too are the environmental impacts. This is because Variation to Alternative C involves, among other things, both an overhead crossing of the James River and a lengthy underground construction project.

The Commission finds that, among other considerations, the significant reliability risks associated with Variation to Alternative C and the costs associated therewith outweigh the benefits from constructing this alternative instead of the Proposed Project. Based on the evidence, the Commission finds that this alternative would not reasonably meet the reliability need identified in this case.

In comments on the Hearing Examiner's Report, James City County and Save the James indicated that that James City County "was able to resolve many, but not all, NERC violation [sic]" with its variations, and that those variations "would work" with "more time and effort."¹¹⁸ Such an assertion fails to appropriately recognize the considerable volume, quality, and weight

¹¹⁷ Ex. 96. These estimates do not include any costs associated with addressing remaining reliability violations or operational problems resulting from Variation to Alternative C.

¹¹⁸ James City County's and Save the James's Joint Comments on Hearing Examiner's Report at 19-20. James City County indicates that Dominion notified it of the Chickahominy Alternative Project and the Proposed Project in January and March of 2012, respectively. *Id.* at 28; Ex. 50 (Reidenbach) at 13.

reliability criteria violations and would cost approximately \$36 million more than the Proposed Project.¹²² Based on the record, the Commission finds that these two alternatives, which no case participant supported, were reasonably rejected.

Because the evidence demonstrates that oncoming reliability violations cannot be reasonably addressed by generation alternatives (alone or in combination with transmission alternatives), demand side management alternatives, or lower voltage transmission (underground or overhead), we turn next to the 500 kV Proposed Project and the 500 kV Chickahominy Alternative Project.

500 kV Transmission Alternatives

Comparing the two electrically equivalent 500 kV projects proposed by Dominion, the Commission agrees with the Hearing Examiner that "the [Chickahominy Alternative Project] has a higher cost than the Proposed Project and will have a greater impact on scenic assets, historic districts and the environment."¹²³ Many public witnesses and case participants – including Dominion, the Ledbetters, Lennar, Charles City County, and Staff – introduced a considerable amount of comparative data, pictures, and other testimony that makes clear the comparative benefits of the Proposed Project.¹²⁴ The record does not support approval of the Chickahominy Alternative Project instead of the Proposed Project.

Because these two projects share many common components, their relative advantages and disadvantages stem from their use of different 500 kV lines: the approximately 8.0 mile-long Surry-Skiffes Creek Line of the Proposed Project and the approximately 37.9 mile-long Chickahominy-Skiffes Creek Line of the Chickahominy Alternative Project. The

¹²² See, e.g., Ex. 23 (Application), Attached Appendix at 56-57.

¹²³ Hearing Examiner's Report at 175.

¹²⁴ See, e.g., Ledbetters' Post-Hearing Brief; Lennar's Post-Hearing Brief at 3-8; Staff's Post-Hearing Brief at 27-36.

Chickahominy route would traverse a pristine area of the Captain John Smith National Historic Water Trail.¹²⁸

In contrast, the James River route is already heavily impacted by more modern developments.¹²⁹ Such developments include the Surry Nuclear Power Plant, Kingsmill (including its marina), water towers, the Ghost Fleet,¹³⁰ and tall theme park rides – all of which are visible from this portion of the James River.¹³¹

The environmental impact of the Proposed Project is discussed in greater detail below in our evaluation of the Proposed Project under applicable law. In this regard, James City County and Save the James argue that even if need is established, the statute requires the Proposed Project to be denied if there is not a route that satisfies the environmental standards in the Code.¹³² As discussed below, however, we have found based on the evidence in this case that the Proposed Project and the route approved herein meet the statutory environmental standards.

THE PROPOSED PROJECT

Need

The Proposed Project addresses significant near-term system needs in the North Hampton Roads Area while also addressing the area's longer-term needs.

As discussed above, the extensive load flow modeling results and analysis in this case demonstrate a significant-system need projected to arise as early as 2015 and that the Proposed

¹²⁸ Tr. 1160-61 (McCoy). *See also* Ex. 63 (Street) at 9-11; Ex. 21 (Ledbetter).

¹²⁹ *See, e.g.*, Tr. 835-41 (Street).

¹³⁰ The Ghost Fleet is "a collection of retired naval vessels that are temporarily anchored offshore from Fort Eustis." Ex. 37 (Harper direct) at 14. *See also* Tr. 817 (Street).

¹³¹ *See, e.g.*, Tr. 1136-37 (McCoy); Ex. 100; Ex. 118 (Harper rebuttal) at Rebuttal Schedules 1, 2.

¹³² *See, e.g.*, James City County's and Save the James's Joint Comments on the Hearing Examiner's Report at 10-18.

Furthermore, the Commission agrees with the Hearing Examiner that an additional benefit of the Proposed Project is that it lowers the possibility "that this or nearby areas will be impacted by the need for additional transmission or generation."¹³⁵

Scenic Assets, Historic Districts and Resources, and the Environment

The Commission recognizes the environmental impact that the Proposed Project will have on the Counties of James City, Surry, and York and the Cities of Newport News and Hampton. However, the Commission finds, based on the record, that the routes chosen for the Surry-Skiffes Creek Line and the Skiffes Creek-Whealton Line, and the use of an existing transmission corridor for the Skiffes Creek Switching Station, reasonably minimize adverse impact on the scenic assets, historic districts and resources, and environment in the area of the Proposed Project. Additionally, we adopt the DEQ recommendations identified below as conditions to our approval that we find, based on the record, are desirable or necessary to minimize adverse environmental impact.

The Proposed Project's more significant impacts to scenic assets, historic districts and resources, and the environment are associated with the 500 kV Surry-Skiffes Creek Line and specifically the portion of the line that crosses the James River. The Proposed Project will require the installation of towers and lines across the James River, but will do so in a part of the James River where the Commission finds that impacts to scenic assets, historic districts and resources, and the environment will be reasonable. The 3,000 mile-long Captain John Smith National Historic Trail, which includes the James River, possesses areas that are significantly developed.¹³⁶ As previously noted, visible already from the part of the James River where the

¹³⁵ Hearing Examiner's Report at 157.

¹³⁶ Tr. 831-32 (Street).

The Historic Triangle offers some of the Commonwealth's and our nation's foremost historic resources.¹⁴² But the documented trove of rich historic resources within the Historic Triangle underscores how the route of the Proposed Project reasonably minimizes adverse impacts to the environment. The Proposed Project is proposed for construction along a route where it will avoid impacting most of the historic resources contained in the Historic Triangle.

Additionally, the record does not support James City County's assertions about the significance of impacts to identified historic resources, scenic assets, and the environment in the area of the Proposed Project. The evidence in this case included, among other things, detailed testimony by experts in photographic simulations and many photographs containing simulated facilities, provided by both Dominion and James City County. Based on a review of the evidence, the Commission agrees with the Hearing Examiner's conclusions that: (1) "the Proposed Project will have a limited visual impact on one section of the Colonial Parkway and a very limited impact on a small portion of Jamestown Island;"¹⁴³ (2) "From most of the Colonial Parkway, and the areas of Jamestown Island that are the focus of most public interest, such as the visitor's center, fort, settlement, and archeological digs, the Proposed Project will not be seen;"¹⁴⁴ (3) "Where the Proposed Project is visible from the Colonial Parkway or Jamestown Island, because . . . the Proposed Project will be more than four to six miles distant, the Proposed Project should blend with the other modern intrusions on the viewshed;"¹⁴⁵ (4) "the Proposed

¹⁴² See, e.g., Ex. 67 (Kelso); Ex. 76 (Chappell); Tr. 1035-37 (Campbell).

¹⁴³ Hearing Examiner's Report at 140. See, e.g., Ex. 23 (Application), Attached Appendix C at 19, 43; Ex. 83 (McCoy), Attached Exhibit WDM-1 at 19, 31; Ex. 84 (Westergard); Ex. 85.

¹⁴⁴ Hearing Examiner's Report at 140. See, e.g., Ex. 124 (Lake rebuttal) at 9; Ex. 83 (McCoy), Attached Exhibit WDM-1 at 18-19, 31.

¹⁴⁵ Hearing Examiner's Report at 140. See, e.g., Ex. 23 (Application), Attached Appendix C at 19, 43; Ex. 83 (McCoy), Attached Exhibit WDM-1 at 19, 31; Ex. 84 and 85 (Westergard).

§ 10.1-419 as an 'Historic River' will be the least visually impacting portion of the James River crossing of the Surry-Skiffes Creek Line."¹⁵⁰ The evidence shows that Hog Island will offer partial screening of this portion of the Surry-Skiffes Creek Line when viewed from the "Historic River" and upriver historic resources.¹⁵¹ We also note that numerous potential alternative solutions have been evaluated in this proceeding, as contemplated by § 10.1-419.

Based on the evidence of environmental impacts in this case – including, but not limited to, impacts to the James River, Carter's Grove and other historic resources and scenic assets, and to Kingsmill – the Commission finds that the Surry-Skiffes Creek Line route reasonably minimizes adverse environmental impacts.

The Commission similarly finds that the Skiffes Creek-Wheaton Line route reasonably minimizes adverse impacts to scenic assets, historic districts and resources, and the environment. This line will be constructed entirely in an existing right-of-way already occupied by transmission lines.¹⁵² As such, the adverse impacts associated with the Skiffes Creek-Wheaton Line route are minimal.

Using the Skiffes Creek Switching Station as part of the Surry-Skiffes Creek Line and the Skiffes Creek-Wheaton Line will also reasonably minimize adverse impacts to scenic assets, historic districts and resources, and the environment. This site is located near, among other things, Route 143, Interstate 64, a jail, a detention center, and the Yorktown Naval Weapons Station.¹⁵³ Additionally, the Skiffes Creek Switching Station will be constructed on property

¹⁵⁰ *Id.* at 139-40.

¹⁵¹ *See, e.g.,* Ex. 66.

¹⁵² *See, e.g.,* Ex. 37 (Harper direct) at 3-5.

¹⁵³ *See, e.g.,* Ex. 118 (Harper rebuttal) at Rebuttal Schedules 1, 2; Ex. 60 (Henderson), Attached Exhibit TCH-10.

major conference center and recreational center in the immediate area of the vicinity of the Proposed Project;¹⁵⁸ (4) shipping traffic through the portion of the James River where the Surry-Skiffes Creek line would cross and which Dominion proposes to accommodate through tower placement and height;¹⁵⁹ and (5) military air traffic in the vicinity of the Surry-Skiffes Creek Line, which Dominion has accommodated through tower location.¹⁶⁰

The Commission finds that the Proposed Project will support economic development in the Commonwealth by cost-effectively maintaining system reliability in a large part of the Commonwealth and adequately increasing transmission capacity. Given these benefits and the modern development existing along the route of the Proposed Project, the Commission cannot conclude that tourism in the Historic Triangle or economic development in the Commonwealth will be negatively impacted by the Proposed Project.

However, as discussed below, the Commission finds that economic development efforts regarding the BASF property, in combination with environmental considerations and consideration of James City County's comprehensive plan, support our approval of the James River crossing known as Variation 4.

Comprehensive Plan

The Commission has considered the evidence received on James City County's 2009 comprehensive plan, which was introduced into the record ("2009 Plan").¹⁶¹ With respect to its 2009 Plan, James City County's witness testified that "any of the routings presented by

¹⁵⁸ Ex. 56 (Middaugh) at 8.

¹⁵⁹ Ex. 83 (McCoy) at 5 ("Because of ship traffic, four of the towers would be almost 300 feet in height."). Ex. 37 (Harper direct) at 13-14; Ex. 118 (Harper rebuttal) at Rebuttal Schedules 1, 2.

¹⁶⁰ Ex. 38 (Harper supplemental direct).

¹⁶¹ We have also considered the testimony of Charles City County regarding its comprehensive plan and potential impacts of the Chickahominy Alternative Project on, among other things, the Chickahominy Indian Tribe's annual Pow-Wow event. Ex. 20 (Rowe) at 2-4.

Variation 4

Dominion and BASF identified several potential approaches to crossing the James River from the Surry Nuclear Power Station property, most with only slight variations in tower alignment. After some of these variations proved unworkable,¹⁶⁶ parties focused on three potential approaches to crossing the James River: Variations 1, 3, and 4.¹⁶⁷

Dominion supports Variation 1, which would come onshore in the middle of the BASF property. Dominion contends, and the Hearing Examiner agrees, that Variation 1 would have a lesser visual impact on Carter's Grove, the Colonial Parkway, and Black's Point than would Variations 3 or 4.¹⁶⁸ Additionally, Dominion contends that it is "uncertain whether it will be able to obtain the entire right-of-way necessary for the Variation 3 or 4 routes as the Company cannot exercise the power of eminent domain over a portion of the property owned by the [James City County Economic Development Authority ("EDA")]."¹⁶⁹

In contrast, BASF asserts that its "main purpose for participating in this case is to make sure the Commission understands how important it is that, if a transmission line is going to be constructed on BASF's property, it needs to go on the Variation 3-4 route on the north side of the property...."¹⁷⁰ BASF's preference for Variation 3 or 4 is based in part on economic development efforts regarding its property, as discussed above. BASF's preference is also based on its active onsite environmental remediation through the execution of an environmental plan

¹⁶⁶ See, e.g., Ex. 38 (Harper supplemental direct) (amending Dominion's recommended tower alignment across the James River as a result of consultation with officials from the United States Department of Defense).

¹⁶⁷ See, e.g., Ex. 66; Ex. 97.

¹⁶⁸ See, e.g., Dominion's Comments on the Hearing Examiner's Report at 52-54; Hearing Examiner's Report at 170.

¹⁶⁹ See, e.g., Dominion's Comments on the Hearing Examiner's Report at 54.

¹⁷⁰ BASF's Comments on the Hearing Examiner's Report at 2.

testified that the EDA was committed to negotiating an easement with Dominion to the extent such an agreement is necessary for the more northern crossing in James City County for Variation 3, which is identical to that of Variation 4.¹⁷⁷ Although Dominion and the EDA had not yet executed such an agreement when the record closed in this proceeding,¹⁷⁸ the Commission fully expects that the EDA, Dominion, and any other necessary parties to such an agreement will continue negotiating in good faith to complete any right-of-way agreement necessary for Variation 4.

Department of Environmental Quality and BASF Property Conditions

The Commission finds it necessary and desirable to condition the approval herein on the conditions contained in the Summary of General Recommendations of the DEQ Report, with two exceptions. First, with respect to coordination with the Department of Forestry, it is appropriate that our Order should not foreclose the Company's ability to negotiate and potentially avoid mitigation for loss of forest land.¹⁷⁹ Second, it is appropriate for Dominion to continue to coordinate with the Federal Aviation Administration and the Virginia Department of Aviation to prevent potential hazards to aviation.¹⁸⁰ Should expansion at the Newport News-Williamsburg Airport develop in the future such that Dominion's continuing use of its existing right-of-way proposed for the Skiffes Creek-Wheaton Line becomes an impediment, such a scenario would involve issues broader than this proceeding, as Dominion's existing right-of-way already includes several other transmission lines.

¹⁷⁷ Tr. 661-85 (Seymour); Ex. 97.

¹⁷⁸ Ex. 134.

¹⁷⁹ Ex. 118 (Harper rebuttal) at 4.

¹⁸⁰ *Id.* at 4-5.

public interest would be served by approving alternative routes making greater use of existing rights-of-way.

Health and Safety

The Commission finds that the Proposed Project does not represent a hazard to human health or safety. The Proposed Project will be installed using well-established methods for transmission line construction. Concerns regarding airspace and water navigation have been addressed by, among other things, tower alignment and coordination with appropriate governmental agencies. Additionally, the evidence in this case regarding electromagnetic fields does not support a finding that the Proposed Project represents a public health or safety hazard.¹⁸⁶

Skiffes Creek Switching Station

Dominion requests a Commission determination, based on the facts and circumstances of this case, that the Skiffes Creek Switching Station constitutes a "transmission line" for purposes of Code § 56-46.1 F, which provides that "[a]pproval of a transmission line pursuant to this section shall be deemed to satisfy the requirements of § 15.2-2232 and local zoning ordinances with respect to such transmission line." Although the Hearing Examiner found that the Commission has discretion to either address this issue or leave it for a circuit court to decide, the Hearing Examiner's Report includes substantial analysis of this issue,¹⁸⁷ which parties had addressed through evidence and in their pleadings.

Dominion asserts that the term "transmission line," which is undefined by the Code, is subject to statutory interpretation and that the Commission is the proper forum for such

¹⁸⁶ See, e.g., Ex. 14 (Erdreich rebuttal); Ex. 17 (Ledbetter) at 6-8.

¹⁸⁷ Hearing Examiner's Report at 157-64, 175.

seeks a statutory interpretation that violates the plain meaning of Code § 56-46.1 because the terms "electrical utility facilities" and "electric transmission line" in Sections (A) and (B) of the statute, respectively, must be separate and distinct;¹⁹⁵ (2) "Dominion is unable to prove that James City County's zoning authority is expressly and clearly preempted for approval of a switching station;"¹⁹⁶ (3) James City County's and Save the James's interpretation of "transmission line" is consistent with a Webster's Dictionary definition¹⁹⁷ and Dominion's use of different terminology in its Application;¹⁹⁸ and (4) engineering witness testimony supports a finding that the term "transmission line" cannot include the Skiffes Creek Switching Station.¹⁹⁹

James City County and Save the James further assert that Dominion "pre-judg[es] the results of a legislative [county zoning] process which has not yet begun, and presum[es] it to be unreasonable against the presumption to be afforded legislative discretion."²⁰⁰ However, James City County and Save the James also advise us that: (1) during the pendency of this case, James City County's zoning administrator issued a zoning determination; and (2) "neither the court nor this Commission has jurisdiction to allow a collateral attack on the Zoning Administrator's determination."²⁰¹

¹⁹⁵ See, e.g., James City County's and Save the James's Joint Comments on the Hearing Examiner's Report at 31-38.

¹⁹⁶ *Id.* at 34.

¹⁹⁷ *Id.* at 36-37.

¹⁹⁸ *Id.* at 37-38.

¹⁹⁹ *Id.* at 36-37.

²⁰⁰ *Id.* at 31.

²⁰¹ *Id.* at 31, 39. Our Staff had previously asserted that circuit courts could determine this issue. Staff's Post-Hearing Brief at 48.

It's really twofold. The strong source, number one, serves basically as a surrogate, if you will, for the Yorktown generation. So it's reasonable to assume that that makes sense.

The other thing is by splitting up the 230 [kV] lines coming from Chickahominy going down further, going down to Whealton, by splitting those circuits and injecting power at . . . [Skiffes Creek], what we're really doing is we're sending power throughout the peninsula both north and south in that case, which is going to create a counterflow to resolve the generator deficiencies in the north, which is going to solve NERC violations to the north. It's also going to deal with the issues of the generation load deficiency in the south at that injection point, as well . . . [W]hat we're really doing is lessening the generation load balance, so we're reducing flows across the northern and southern circuit sends [sic] into the system.²⁰⁷

The need for the Skiffes Creek Switching Station, and indeed the entire Proposed Project, is underscored by the record developed on potential transmission alternatives thereto. As discussed above, only the Chickahominy Alternative Project – which also requires construction of the Skiffes Creek Switching Station – can reasonably address fast-approaching NERC reliability violations for the North Hampton Roads Area.

The evidence demonstrates that the ability to address significant NERC reliability violations projected to occur in the North Hampton Roads Area as early as 2015 depends, in large part, on the Skiffes Creek Switching Station. Consequently, if the Proposed Project, including the Skiffes Creek Switching Station, is not constructed soon, the loss of electric service can be expected across a broad swath of the Commonwealth.

As amply demonstrated in the record, transmission studies under federal and Virginia requirements reveal a significant reliability risk for customers that must be promptly addressed. The Commission is greatly concerned about this identified need. However, our identification of the electric equipment to be included in certificates of public convenience and necessity for

²⁰⁷ Tr. 1110-11 (Chiles).

evidence in this case shows that numerous high voltage transmission conductors, metallic lines, and wires will enter, exit, and be located throughout -- and as part of -- the Skiffes Creek Switching Station.²¹² James City County and Save the James also state that "[a] 'transmission line' is certainly an 'assemblage of electronic [sic] elements' such as the lines, the conductors, and the towers."²¹³ The very purpose and function of the Skiffes Creek Switching Station is to assemble numerous electrical transmission elements, including conductors, circuit breakers, switches, coupling capacitor voltage transformers, wave traps, transformers, and arresters.²¹⁴

Given the engineering evidence in this case, the Commission cannot pretend as if the Skiffes Creek Switching Station -- which will be a critical part of several high voltage transmission lines -- is not a part of any transmission line for purposes of Code § 56-46.1 F. The Skiffes Creek Switching Station is no less a part of the Surry-Skiffes Creek and Skiffes Creek-Wheaton Lines than the towers which James City County and Save the James recognize to be part of these lines.²¹⁵ No part of this vital project will be built or can function without the Skiffes Creek Switching Station. Accordingly, the transmission line certificates of public convenience and necessity authorized herein shall include the Skiffes Creek Switching Station.

²¹² Ex. 23 (Application), Attached Appendix at 262, 264-65; Ex. 26; Ex. 35 (Garrett direct) at 4. The Hearing Examiner correctly distinguished between a transmission switching station, as proposed in this proceeding, and a distribution substation. Hearing Examiner's Report at 161-62.

²¹³ James City County's and Save the James's Joint Comments on the Hearing Examiner's Report at 36-37.

²¹⁴ Ex. 23 (Application), Attached Appendix at 262, 264-65; Ex. 26; Ex. 35 (Garrett direct) at 4; Ex. 87 (Nedwick rebuttal) at 36-38.

²¹⁵ James City County's and Save the James's Joint Comments on the Hearing Examiner's Report at 36-37. Indeed, the record shows that the Skiffes Creek Switching Station property will include several steel backbone structures, among other supporting equipment. *See, e.g.*, Ex. 23 (Application), Attached Appendix at 264; Ex. 35 (Garrett direct) at 4.

For similar reasons, James City County's motion to supplement its comments on the Hearing Examiner's Report with comments from the NPS, which was a public witness in this proceeding, is denied. Federal agencies often participate as parties to our proceedings, but the NPS declined to do so in this proceeding. Additionally, James City County offers as evidence a communication submitted by the NPS to a federal agency as part of a different review process. The Commission trusts that the NPS communication will receive due consideration in the federal review process for which it was intended.

NPS's written comments that were submitted in compliance with our Rules and Order for Notice and Hearing have been fully considered. Additionally, we note that the DEQ recommendations that are adopted herein direct Dominion to consult with, among others, NPS.

Accordingly, IT IS ORDERED THAT:

(1) Pursuant to §§ 56-46.1, 56-265.2, and related provisions of Title 56 of the Code, the Company's Application for approval and for certificates of public convenience and necessity is granted, as provided herein and subject to the requirements set forth in this Order.

(2) Dominion is authorized to construct and operate the Proposed Project with Variation 4.

(3) Pursuant to the Utility Facilities Act, Chapter 10.1 (§ 56-265.1 *et seq.*) of Title 56 of the Code, the Company is issued the following certificates of public convenience and necessity:

Certificate No. ET-138e, which authorizes Virginia Electric and Power Company under the Utility Facilities Act to operate certificated facilities in Surry County, all as shown on the map attached to the certificate, and to construct and operate facilities as authorized in Case No. PUE-2012-00029, cancels Certificate No. ET-138d, issued to Virginia Electric and Power Company on June 9, 1989, in Case No. PUE-1988-00083.

Certificate No. ET-771, which authorizes Virginia Electric and Power Company under the Utility Facilities Act to operate

Attachment E

COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

AT RICHMOND, FEBRUARY 28, 2014

SCC-CLERK'S OFFICE
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2014 FEB 28 P 1:50

APPLICATION OF

VIRGINIA ELECTRIC AND POWER COMPANY
d/b/a DOMINION VIRGINIA POWER

CASE NO. PUE-2012-00029

For approval and certification of electric facilities:
Surry-Skiffes Creek 500 kV Transmission Line,
Skiffes Creek-Wheaton 230 kV Transmission Line, and
Skiffes Creek 500 kV-230 kV-115 kV Switching Station

ORDER AMENDING CERTIFICATES

On June 11, 2012, Virginia Electric and Power Company d/b/a Dominion Virginia Power ("Dominion" or "Company") filed with the State Corporation Commission ("Commission") an application for approval and certification of an electric transmission project, or for approval and certification of an alternative transmission project ("Application"), pursuant to § 56-46.1 and the Utility Facilities Act (§ 56-265.1 *et seq.*) of the Code of Virginia ("Code"). On November 26, 2013, the Commission issued in this proceeding an Order that: (1) addressed the evidence admitted into the record, and the arguments presented; and (2) approved certificates of public convenience and necessity for a transmission project to be constructed by Dominion ("Certificate Order").

In the Certificate Order, the Commission found that the record developed for that order demonstrated significant reliability risks beginning as early as 2015 in the North Hampton Roads Area, which generally corresponds to the Peninsula, Middle Peninsula, and Northern Neck regions of Virginia.¹ The Commission further found that, to address the demonstrated reliability

¹ Certificate Order at 11-12, 19-24. Specifically, the "North Hampton Roads Area" refers, for purposes of this proceeding, to the counties of Charles City, James City, York, Essex, King William, King and Queen, Middlesex, Mathews, Gloucester, King George, Westmoreland, Northumberland, Richmond, and Lancaster; and the cities of Williamsburg, Yorktown, Newport News, Poquoson, Hampton, West Point, and Colonial Beach. *Id.* at 12.

northern route in the river, before angling back across, and travelling south of, Variation 4 for the remainder of the overhead river crossing. Whereas Variation 4 comes onshore near the northern, upriver boundary of property owned by respondent BASF, Variation 1 comes onshore further downriver on BASF's property. At a point along BASF Drive, the tower alignment for Variation 1 joins with that of Variation 4.

In advocating for Commission approval of Variation 1 in the Certificate Order, Dominion had expressed uncertainty about whether it would be able to obtain a right-of-way across property owned by the James City County Economic Development Authority ("EDA") needed for Variation 4.⁵ In contrast, BASF preferred Variation 4 over Variation 1, based primarily on economic development and environmental considerations.⁶ BASF expressed concern about the possible impact of Variation 1 on BASF's environmental remediation efforts that are ongoing in portions of the BASF property through which Variation 1 would cross, although Dominion contested BASF's evidence on this issue.⁷

The Hearing Examiner assigned to this proceeding recommended Commission approval of Variation 4 for the Surry-Skiffes Creek Line. The Hearing Examiner further recommended that Commission approval of Variation 4 should be conditioned on the execution of a right-of-way agreement between the EDA and Dominion. If such an agreement could not be reached within three weeks from the Commission's final order in this proceeding, the Hearing Examiner had recommended that Variation 1 should be approved.⁸

⁵ *Id.* at 55.

⁶ *Id.* at 55-56.

⁷ *Id.* BASF's remediation plan for this property was approved and is overseen by the Virginia Department of Environmental Quality. *Id.*

⁸ *Id.* at 56.

On December 16, 2013, Dominion filed a Petition for Reconsideration or Rehearing ("Petition").¹⁵ In its Petition, Dominion requested that the Commission adopt the Hearing Examiner's recommended condition for approval of Variation 4. In the alternative, Dominion requested that the Commission convene an expedited and limited hearing to consider: (1) whether EDA will provide the necessary right-of-way agreement for Variation 4; and (2) an adjustment to Variation 4 identified herein as Variation 4.1.¹⁶

Variation 4.1 is similar to Variation 4, except for a part of the route in the industrial area of James City County where the Surry-Skiffes Creek Line comes onshore. For this part of the route, Variation 4.1 shifts south of Variation 4 to avoid the EDA property. To avoid the EDA property, Variation 4.1 would require additional right-of-way from BASF and Colonial Penniman, LLC, another owner of property in the industrial area through which Variation 4.1 crosses.¹⁷ Therefore, both Variations 1 and 4.1 avoid the EDA property.

On January 7, 2014, the Commission issued an Order finding additional proceedings necessary to determine if a limited portion of the approved route for the Surry-Skiffes Creek Line must be modified in order to allow the Certificated Project to be built and to address the critical reliability need found herein. The Commission directed the Hearing Examiner to undertake these additional proceedings in this case, which the Certificate Order had kept open. Specifically, the January 7, 2014 Order set the following issues for hearing:

¹⁵ On December 17, 2013, the Commission issued an order granting reconsideration for the limited purpose of considering the Petition.

¹⁶ Dominion's Petition included a more conceptual version of Variation 4.1 that the Petition identified as "Adjusted Variation 4." Tr. 1897-98. To avoid confusion, the Commission herein identifies this variation, including its conceptual design, as Variation 4.1.

¹⁷ Ex. 136, 137.

evidence and issues in this proceeding, and made certain findings and recommendations ("Hearing Examiner's Report"). The Hearing Examiner, among other things, concluded that the Company is not able to implement Variation 4, recommended that Variation 4.2 not be considered a viable route, found advantages and disadvantages to Variations 1 and 4.1, and recommended Variation 4.1.²² Based on his findings, the Hearing Examiner recommended, among other things, that the Commission enter an order that amends Dominion's current certificates of public convenience and necessity.²³

On February 14, 2014, Dominion and BASF filed comments on the Hearing Examiner's Report. Dominion continues to recommend Commission approval of Variation 1, which the Company asserts best minimizes the risk that the Certificated Project will not be completed before generation at the Yorktown Power Station must be retired.²⁴ If Variation 1 is not selected, Dominion recommends Commission approval of Variation 4.1.²⁵ BASF recommends Commission approval of Variation 4.2 and continues to oppose Variation 1.²⁶

NOW THE COMMISSION, upon consideration of this matter, is of the opinion and finds that Commission approval of Variation 1 is now required by the public convenience and necessity, subject to the findings and conditions contained in this Order Amending Certificates. Because Dominion's construction of Variation-4 is no longer viable, the Commission approves what has now become the best variation that satisfies the Code, Variation 1. Time is of the essence if reliability is to be maintained in the North Hampton Roads Area.

²² February 6, 2014 Hearing Examiner's Report at 9-13.

²³ *Id.*

²⁴ Dominion's Comments at 2-12.

²⁵ *Id.* at 2-3, 11-12.

²⁶ BASF's Comments at 8.

notwithstanding its prior commitment, will not provide Dominion a right-of-way for an overhead transmission line without the consent of a neighboring landowner, Williamsburg Development, Inc. ("WDI").³⁰ WDI, in turn, will not consent to an overhead transmission line.³¹ In its Comments on the Hearing Examiner's Report, BASF states as follows:

The parties expended tremendous effort and resources to identify the best, least-impactful route across the BASF property, and the Commission determined that Variation 4 was that route. It is disappointing that the James City County EDA did not follow through on the commitment it made to provide the easement necessary for Variation 4.³²

Since the evidence indicates that the EDA does not intend to honor its prior expressed commitment to negotiate a right-of-way agreement with Dominion, the Commission finds that maintaining reliable electric service for customers in the North Hampton Roads Area can no longer depend on Dominion's ability to obtain a right-of-way from the EDA. It has become necessary to evaluate other routing variations for a limited portion of the Surry-Skiffes Creek Line.

SYSTEM NEED AND RELIABILITY

Need in the North Hampton Roads Area

The record developed for the Certificate Order demonstrated a clear need for Dominion to construct significant new electric infrastructure.³³ Such infrastructure is needed to address upcoming violations of North American Electric Reliability Corporation ("NERC") standards.

³⁰ Such evidence included oral testimony, resolutions of the EDA, minutes from Board meetings of the EDA, and written communications between counsel for Dominion and the EDA that were admitted into the record. *See, e.g.*, Tr. 1889-92; Ex. 135, 139, 145, 146.

³¹ *Id.*

³² BASF's Comments at 3.

³³ Certificate Order at 19-23.

The significance of the EPA to the reliability risks in the North Hampton Roads Area involves compliance deadlines, and opportunities for extensions of such deadlines, under rules promulgated by the agency.³⁹ Dominion plans to retire several generation units as a result of stricter environmental regulations, including the EPA's Mercury Air Toxics Standard ("MATS Rule").⁴⁰ The projected NERC reliability violations for the North Hampton Roads Area that were evaluated in the Certificate Order accelerated, from 2019 to 2015, when the planned retirement of coal-fired generation at Dominion's Yorktown Power Station in 2015 was incorporated in load flow models that identify such violations.⁴¹

EPA's MATS Rule includes an April 2015 compliance deadline, with the possibility of two limited extensions of this deadline. Dominion can request a one-year extension of the MATS Rule deadline from the Department of Environmental Quality ("DEQ") and can request a second one-year extension, in the form of an enforcement Administrative Order, from the EPA.⁴² Thus, if Dominion obtains both extensions, it is possible for the units retiring at Yorktown Power Station to continue operating lawfully until April 2017, at the latest, under current law.⁴³

While Dominion's compliance with EPA's regulations affects the back-end of the construction cycle for the Certificated Project (*i.e.*, the completion date), Dominion's regulatory compliance with the Army Corps affects the front-end, or the beginning, of the construction

³⁹ See, e.g., *National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units*, 77 Fed. Reg. 9304, Final Rule (Feb. 16, 2012).

⁴⁰ Certificate Order at 21.

⁴¹ *Id.* at 21-23.

⁴² *Id.* at 36, n.91.

⁴³ Ex. 138.

Company has requested informal guidance from the Corps, which indicated that a route comparable to Variation 4.1 would probably require that the Company reapply for approval from the Corps.⁴⁹

Dominion estimates, for example, that it can complete the Certificated Project with Variation 4.1 by September 2016, which is beyond the MATS extension period that may be requested from the DEQ, but is within the additional one-year period for which an Administrative Order, if granted by the EPA, would apply.⁵⁰ However, this estimate by Dominion also assumes that the Army Corps would not require an EIS.⁵¹ Adding one year to Dominion's estimated completion date for the Certificated Project using Variation 4.1 pushes completion of the Certificated Project beyond the final MATS extension period.

Dominion also testified it would be "hard pressed" to complete the Certificated Project by April 2017 – when the final MATS extension would expire – under a scenario in which the Commission approves a variation other than Variation 1 but the Army Corps rejects that variation, requiring Variation 1 to be refiled with both the Commission and the Corps.⁵² Again, Dominion's April 2017 estimated date of completion under this possible scenario assumes that the Corps would not require an EIS for Variation 4.1 or Variation 1.⁵³

All of Dominion's estimated construction schedules for the different variations of the Surry-Skiffes Creek Line also assume that the Company will be able to obtain, from PJM Interconnection, LLC ("PJM"), timely outages of existing transmission lines required for safe

⁴⁹ Tr. 1921-23.

⁵⁰ Ex. 138.

⁵¹ Tr. 1920-21.

⁵² Dominion's Comments at 6-7; Ex. 138; Tr. 1903.

⁵³ Tr. 1920-21.

The additional evidence received during the January hearing, and the passage of time, however, have increased the Commission's concern about reliability in the North Hampton Roads Area, and therefore must weigh more heavily in the Commission's evaluation of the limited variations of the Surry-Skiffes Creek Line, as discussed below.

SURRY-SKIFFES CREEK LINE VARIATIONS

The Commission finds, based on the record, that Variation 1 is the best alternative to Variation 4, is preferable to Variations 4.1 and 4.2, and continues to satisfy the requirements of the Code.

Variation 1 involves only a limited deviation from Variation 4. The overall attributes and impacts of Variation 1 therefore differ little from those of Variation 4, which the Commission previously approved under the Code. Variations 1 and 4 are similar in that they: (1) follow the same route in Surry County on Dominion's Surry Nuclear Power Station property; (2) cross the James River, initially along the same overhead route, between Surry and James City Counties; (3) come onshore in James City County on property owned by BASF; (4) parallel a road on BASF's property, BASF Drive, along an existing Dominion right-of-way; and (5) continue along the same route from BASF's property to the Skiffes Creek Switching Station.

For the limited portion of Variation 1 that does differ from Variation 4, the Commission finds, consistent with our findings in the Certificate Order, that Variation 1 presents a reasonable path through an industrial area of James City County with limited impacts on scenic assets, historic districts and resources, and the environment in the area.⁵⁸ Variation 1 will impact certain properties differently than Variation 4 and other variations; however, Variation 1 allows Dominion to: (1) reasonably minimize adverse environmental impacts, including impacts to

⁵⁸ See, e.g., Ex. 136, 137, 141, 142.

Commission agrees with the Hearing Examiner that Variation 1 will have less visual impact than Variation 4.1 on certain historic resources, including Carter's Grove.⁶³ Because most of the river crossing for Variation 1 would be further south than the crossing for Variation 4.1, which is the same as that of Variation 4.2, Variation 1 would be located farther than Variations 4.1 and 4.2 from Carter's Grove and from other, more distant historic resources.⁶⁴ On the other hand, an environmental advantage of Variations 4.1 and 4.2 is that these variations avoid certain environmental remediation areas on BASF's property which Variation 1 would cross.⁶⁵ Based on the record, the Commission finds that the Certificated Project using Variation 1 would reasonably minimize adverse impact to the scenic assets, historic districts, and environment of the project area.

The Commission has considered all record evidence relevant to economic development considerations, including evidence regarding, among other things, BASF's and Colonial Penniman's properties.⁶⁶ The timely construction of Variation 1 and the rest of the Certificated Project are necessary to address significant reliability risks in the North Hampton Roads Area. Customers in these counties and cities include citizens, schools, local governments, and businesses that depend on reliable power for a variety of needs. As required by statute, we have considered the impact on economic development in the Commonwealth and, as stated below, approve Variation 1.

Having weighed all the evidence, including, but not limited to, the evidence specifically identified herein, the Commission finds that Variation 1 is required by the public convenience

⁶³ See, e.g., Ex. 141, Tr. 1904; Certificate Order at 55-56.

⁶⁴ *Id.*

⁶⁵ Ex. 141; Tr. 1929.

⁶⁶ See, e.g., Tr. 1911-12; Tr. 1931-32.

Certificate No. ET-138f, which authorizes Virginia Electric and Power Company under the Utility Facilities Act to operate certificated facilities in Surry County, all as shown on the map attached to the certificate, and to construct and operate facilities as authorized in Case No. PUE-2012-00029, cancels Certificate No. ET-138e, issued to Virginia Electric and Power Company on November 26, 2013, in Case No. PUE-2012-00029.

Certificate No. ET-77m, which authorizes Virginia Electric and Power Company under the Utility Facilities Act to operate certificated facilities in the Counties of James City and York and the Cities of Hampton and Newport News, all as shown on the map attached to the certificate, and to construct and operate facilities as authorized in Case No. PUE-2012-00029, cancels Certificate No. ET-77l, issued to Virginia Electric and Power Company on November 26, 2013, in Case No. PUE-2012-00029.

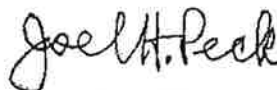
(4) The Commission's Division of Energy Regulation forthwith shall provide Dominion copies of the certificates issued in Ordering Paragraph (3) with the detailed maps attached.

(5) The construction approved herein must be completed and in service by December 31, 2015, provided, however, that Dominion is granted leave to apply for an extension for good cause shown.

(6) This case shall remain open.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, Virginia 23219.

A True Copy
Teste:



Clerk of the
State Corporation Commission

Attachment F



2750 Monroe Blvd
Audubon, PA 19403-2497

Michael J. Kormos
Executive Vice President –
Operations

April 11, 2014

Edward H. Baine
VP, Power Generation System Operations
Dominion Generation
5000 Dominion Boulevard
Glen Allen, VA 23060

Re: Updated PJM Reliability Notification for Deactivation of Yorktown Generating Units Nos. 1 and 2

Dear Mr. Baine:

This letter is submitted by PJM Interconnection, L.L.C. ("PJM") as a follow-up to the November 8, 2012 and December 14, 2012 ("PJM Letters") Deactivation Response letters sent to Mr. Doug Holley of Dominion Generation ("Dominion Generation") regarding the Deactivation of Dominion's Yorktown generating units Nos. 1 and 2. The PJM Letters indicated that the Deactivation of both Yorktown Units Nos. 1 and 2 will adversely affect the reliability of the PJM Transmission System, and that upgrades to the system were required. The PJM Letters also mentioned that the upgrades were expected to be completed by June 1, 2015 and, therefore, the Yorktown Units Nos. 1 and 2 could deactivate as scheduled on December 31, 2014. PJM has determined that due to regulatory and permitting issues, the required upgrades will not be completed by June 1, 2015. Instead, such upgrades are estimated to be completed by the 4th quarter of 2016. This new date is beyond the requested Deactivation Date of December 31, 2014 for the Yorktown Units Nos. 1 and 2. PJM will continue to refine its analysis, to determine when the Yorktown Units can be released without adversely impacting the reliability of the bulk electric system.

As you are aware, regardless of whether Deactivation of a generating unit would adversely impact the reliability of the Transmission System, the Generation Owner may deactivate its generating unit, subject to section 113.1 notice requirements. Pursuant to Part V, Section 113.2 of the PJM Tariff, the Generation Owner must notify PJM within 30 days of this letter whether these generating units will continue to operate beyond their desired Deactivation Date during the period of construction of the Transmission System reliability upgrades necessary to alleviate the reliability impacts resulting from the Deactivation of these generating units. If Dominion Generation determines that the generating units will continue operating, Dominion Generation must provide PJM with an updated estimate of the amount of any project investment that would be required to keep the units in service and the time period the generating units would be out of